

**Meeting of the Central Valley Flood Protection Board**

**October 17, 2008**

**Department of Water Resources Staff Report  
Delta Suisun Marsh Office  
Delta Levees Program  
Delta Levees Maintenance Subventions Program**

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Introduction:

Staff presented its recommendations to the Board at the September 19, 2008 meeting (copy attached). The Board decided to defer its final decision to the October 17, 2008 meeting. Delaying the final decision for a month provided staff the opportunity to review the Delta Levees Subventions Program Procedures and Criteria, dated September 21, 2007, and made the following changes.

- a. Changed all references to the "Reclamation Board" to "Central Valley Flood Protection Board"
- b. Revised application submittal deadline from May 1 to July 1 ( Section 3.2 Application Deadline )
- c. Moved the filing date of the final claims from August 30 to November 1 of the following fiscal year ( Section 4.3 Agency Claims)
- d. Changed the deadline to submit final claims for reimbursement of easement acquisition costs to November 1.

Revised Staff Recommendations

Staff recommends the following:

1. Board to approve the Delta Levees Subventions Program Procedures and Criteria, dated October 17, 2008. This updated version includes the changes discussed above.
2. Board to approve Table 2, which establishes reimbursement amount and the limits on advances based on the prioritization of work using the Board approved Delta Levees Subventions Program Procedures and Criteria.

**Meeting of The Reclamation Board**

**September 19, 2008**

**Department of Water Resources Staff Report  
Delta Suisun Marsh Office  
Delta Levees Program  
Delta Levees Maintenance Subventions Program**

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Introduction:

The Delta Levees Maintenance Subventions is authorized in the California Water Code, Sections 12980 thru 12995. The program has been in effect since passage of the Way Bill in 1973 which has been modified periodically by Legislation since then. The intent of the Legislature, as stated in the Water Code, is to preserve physical characteristics of the Delta as much as it exists at the present time.

Water Code Section 12987 calls on the Department to prioritize the islands for receipt of grant funds through the program and recommend the prioritization to the Reclamation Board (Board). The Board reviews and approves the Department's recommendations and enters into an agreement with local levee maintaining agencies to reimburse eligible costs up to the amount of available funds.

The Department has worked with the Board to establish guidelines and procedures used to manage the program. A copy of the guidelines adopted in September 2007 is attached to this package (Attachment A).

Historical Perspective:

Historically, the Subventions Program's funds averaged about \$6 millions annually. In the past 10 years, requests for reimbursement for maintenance work, as identified in the Board Guidelines, submitted by the local maintaining agencies has averaged about \$7 million a year, which translates to work on approximately 650 miles of both project and non-project levees. Historically, Subventions Program provides technical and financial support to the work outlined as maintenance and Priority 1.

Fiscal Year 2008-09:

The anticipated funding for this fiscal year is about \$15.0 million. This funding will not be guaranteed until the budget is signed; however, staff has prepared its recommendations assuming the funding will be included in the approved budget. Tables 1 thru 3 are prepared based on the maintenance cap of \$20,000 per levee mile, as approved by the Board last year. Table 1 lists application amounts by levee

maintaining agencies and shows estimated expenditures by priority, as defined in the Board Guidelines. Tables 2 shows maximum and estimated eligible reimbursements and corresponding advance amounts. Tables 3 provides summary of reimbursements and corresponding rates for each priority up to the anticipated funding of \$15.0 million.

#### Delta Levees Subventions Program Procedures and Criteria

At this time we are not requesting any changes in the guidelines as adopted by the Board in September 2007.

#### Staff Recommendation

Both DWR and the Board are interested in preserving the Delta for conveyance, protection of life and property, and for habitat. Therefore staff recommends the following:

3. Board to approve the continued use of the Delta Levees Subventions Program Procedures and Criteria, dated September 21, 2007.
4. Board to approve Table 2, which establishes reimbursement amount and the limits on advances based on the prioritization of work using the Board approved Delta Levees Subventions Program Procedures and Criteria.

**Table 1**  
**2008-09 DELTA LEVEE MAINTENANCE SUBVENTIONS PROGRAM**

RD NO	Name	Application Amount \$	Net Allowable Maintenance \$	Levee Rehabilitation				
				Priority 1			Priority 2	Priority 3
				Category 2 Fish & Wild. \$	Category 3 HMP \$	Category 4 Bulletin 192-82 \$	\$	\$
2126	Atlas Tract	136,000	43,700	5,000	0	85,000	0	0
2028	Bacon Island	1,988,000	273,600	0	0	1,440,000	260,000	0
	Bethel Island MID	570,000	218,500	100,000	0	240,000	0	0
2042	Bishop Tract	1,742,500	148,200	37,500	500,000	242,500	806,500	0
404	Boggs Tract	170,000	13,300	30,000	0	40,000	86,000	0
756	Bouldin Island	2,260,000	342,000	0	700,000	1,100,000	100,000	0
2033	Brack Tract	865,500	205,200	0	0	649,500	0	0
2059	Bradford Island	203,000	140,600	15,000	40,000	0	0	0
	Brannan-Andrus LMD	2,460,500	558,600	65,000	0	1,807,500	0	0
800	Byron Tract	3,805,000	184,300	215,000	300,000	455,000	2,641,000	0
2098	Cache-Haas Slough	165,000	153,500	500	0	0	0	
2117	Coney Island	259,000	102,600	3,500	125,000	22,500	0	0
2111	Deadhorse Island	240,000	49,400	9,000	70,000	109,000	0	0
2137	Dutch Slough	400,000	98,800	12,500	200,000	83,500	0	0
536	Egbert tract	74,000	63,400	0	0	0	0	0
2029	Empire Tract	771,000	199,500	0	440,000	121,000	0	0
773	Fabian Tract	290,000	221,400	50,000	0	0	0	0
2113	Fay Island	281,500	30,400	26,500	60,000	73,500	89,500	0
3	Grand Island	842,000	547,200	0	0	266,000	0	0
2060	Hasting Tract	314,800	298,800	0	0	0	0	0
2025	Holland Tract	1,920,000	209,000	0	0	1,100,000	600,000	0
799	Hotchkiss Tract	120,000	111,100	0	0	0	0	0
830	Jersey Island	650,000	294,500	13,000	30,000	297,000	0	0
2038	Jones, Lower Tract	5,225,000	171,000	350,000	0	550,000	4,145,000	0
2039	Jones, Upper Tract	1,350,000	176,700	360,000	0	570,000	234,000	0
2044	King Island	1,222,500	172,900	0	0	910,000	130,500	0
307	Lisbon Island	367,500	125,400	35,000	0	200,500	0	0
2118	Little Mandeville Island	437,000	85,500	0	0	347,000	0	0
2027	Mandeville Island	2,910,000	271,700	0	350,000	1,080,000	1,194,000	0
2030	McDonald island	4,945,000	260,300	10,000	100,000	1,260,000	3,301,000	0
2110	McCormack-WM. Tract	195,000	167,200	0	0	19,000	0	0
2041	Medford Island	429,000	112,100	0	125,000	186,000	0	0
150	Merritt Island	565,000	343,900	0	0	203,000	0	0

999	Netherlands	339,000	296,600	10,000	0	0	0	0
				Levee Rehabilitation				
		Priority 1				Priority 2	Priority 3	
RD NO	Name	Application Amount \$	Net Allowable Maintenance \$	Category 2 Fish & Wild. \$	Category 3 HMP \$	Category 4 Bulletin192-82 \$	\$	\$
348	New Hope Tract	1,084,000	330,600	25,000	0	711,000	0	0
2024	Orwood/Palm Tract	1,160,000	264,100	60,000	0	822,000	0	0
551	Pearson District	591,000	267,900	0	0	309,000	0	0
2058	Pescadero District	130,000	47,500	5,000	20,000	55,000	0	0
1007	Pico/Naglee Tract	151,000	112,700	30,000	0	0	0	0
2090	Quimby Island	1,903,500	133,000	12,500	650,000	37,500	1,063,500	0
2037	Rindge Tract	742,500	300,200	0	425,000	1,500	0	0
684	Roberts Island, Lower	899,000	304,000	200,000	0	379,000	0	0
524	Roberts Island, Middle	314,500	184,300	4,500	25,000	91,000	0	0
544	Roberts Island, Upper	721,000	285,000	5,000	0	416,000	0	0
403	Rough & Ready Island	628,000	129,200	40,000	0	452,000	0	0
501	Ryer Island	255,500	212,400	22,500	0	0	0	0
2074	Sargent-Barnhart Tract	4,906,255	66,500	0	0	350,000	4,486,255	0
341	Sherman Island	506,000	370,500	10,000	0	106,000	0	0
2115	Shima Tract	15,178,500	125,400	22,500	637,500	0	14,386,500	0
1614	Smith Tract	909,000	53,200	12,500	0	267,500	573,000	0
2089	Stark Tract	263,000	66,500	2,000	0	191,000	0	0
38	Staten Island	3,162,000	467,400	10,000	0	2,450,000	210,000	0
548	Terminus Tract	1,035,000	305,900	15,000	0	698,000	0	0
1601	Twitchell Island	1,150,500	226,100	11,500	125,000	776,000	0	0
563	Tyler Island	1,595,000	435,100	25,000	300,000	812,000	0	0
1	Union Island, East	700,000	266,000	25,000	0	395,000	0	0
2	Union Island, West	820,500	307,800	10,000	0	486,500	0	0
1607	Van Sickle Island	120,000	70,300	0	0	46,000	0	0
2065	Veale Tract	556,500	96,900	115,000	311,500	28,000	0	0
2023	Venice Island	4,502,500	233,700	15,000	1,215,000	0	3,026,500	0
2040	Victoria Island	957,500	286,900	10,000	0	645,500	0	0
554	Walnut Grove	80,000	75,200	0	0	0	0	0
2026	Webb Tract	1,960,000	245,100	0	0	1,290,000	412,000	0
828	Weber Tract	140,000	32,300	30,000	0	76,000	0	0
2122	Winter Island	299,500	91,200	0	200,000	3,500	0	0
2072	Woodward Island	1,149,000	167,200	110,000	0	770,000	93,000	0
2119	Wright-Elmwood Tract	1,054,500	134,900	65,000	0	645,000	202,500	0
2068	Yolano	75,000	66,300	0	0	0	0	0
<b>Total</b>		<b>88,213,055</b>	<b>13,452,200</b>	<b>2,240,500</b>	<b>6,949,000</b>	<b>26,767,500</b>	<b>38,040,755</b>	<b>0</b>

**Table 2**  
**2008-09 DELTA LEVEE MAINTENANCE SUBVENTIONS PROGRAM**  
**ESTIMATED REIMBURSEMENTS**

RD NO	Name (Engineer)	Application Amount	Levee Length Miles	Deductible	Eligible Costs	Maximum	Estimated	Advance
				\$1,000		Reimbursement	Available	
				Per Mile		75 % of (4)	Reimbursement	
		\$		\$		\$	\$	\$
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
2126	Atlas Tract (KSN)	136,000	2.3	(2,300)	133,700	100,275	36,525	27,394
2028	Bacon (MBK)	1,988,000	14.4	(14,400)	1,973,600	1,480,200	205,200	153,900
	Bethel (Dominic)	570,000	11.5	(11,500)	558,500	418,875	238,875	179,156
2042	Bishop (KSN)	1,742,500	7.8	(7,800)	1,734,700	1,301,025	371,717	278,788
404	Boggs Tract (Rosten)	170,000	0.7	(700)	169,300	126,975	32,475	24,356
756	Bouldin (MBK)	2,260,000	18	(18,000)	2,242,000	1,681,500	581,918	436,439
2033	Brack (MBK)	865,500	10.8	(10,800)	854,700	641,025	153,900	115,425
2059	Bradford (GME)	203,000	7.4	(7,400)	195,600	146,700	135,295	101,472
	Brannan-Andrus (DCC)	2,460,500	29.4	(29,400)	2,431,100	1,823,325	467,700	350,775
800	Byron (KSN)	3,805,000	9.7	(9,700)	3,795,300	2,846,475	438,940	329,205
2098	Cache-Haas Slough (MBK)	165,000	11	(11,000)	154,000	115,500	115,500	86,625
2117	Coney (KSN)	259,000	5.4	(5,400)	253,600	190,200	137,685	103,264
2111	Deadhorse (KSN)	240,000	2.6	(2,600)	237,400	178,050	76,342	57,256
2137	Dutch Slough (GT)	400,000	5.2	(5,200)	394,800	296,100	176,452	132,339
536	Egbert (MBK)	74,000	10.6	(10,600)	63,400	47,550	47,550	35,663
2029	Empire (MBK)	771,000	10.5	(10,500)	760,500	570,375	354,174	265,630
773	Fabian (Rosten)	290,000	18.6	(18,600)	271,400	203,550	203,550	152,663
2113	Fay (KSN)	281,500	1.6	(1,600)	279,900	209,925	70,568	52,926
3	Grand (MBK)	842,000	28.8	(28,800)	813,200	609,900	410,400	307,800
2060	Hasting Tract (MBK)	314,800	16	(16,000)	298,800	224,100	224,100	168,075
2025	Holland (MBK)	1,920,000	11	(11,000)	1,909,000	1,431,750	156,750	117,563
799	Hotchkiss (Burns)	120,000	8.9	(8,900)	111,100	83,325	83,325	62,494
830	Jersey Island (ISD)	650,000	15.5	(15,500)	634,500	475,875	244,572	183,429
2038	Jones, Lower (Rosten)	5,225,000	9	(9,000)	5,216,000	3,912,000	390,750	293,063
2039	Jones, Upper (Rosten)	1,350,000	9.3	(9,300)	1,340,700	1,005,525	402,525	301,894
2044	King (MBK)	1,222,500	9.1	(9,100)	1,213,400	910,050	129,675	97,256
307	Lisbon (KSN)	367,500	6.6	(6,600)	360,900	270,675	120,300	90,225
2118	Little Mandeville (MBK)	437,000	4.5	(4,500)	432,500	324,375	64,125	48,094
2027	Mandeville (KSN)	2,910,000	14.3	(14,300)	2,895,700	2,171,775	366,484	274,863
2030	McDonald island (KSN)	4,945,000	13.7	(13,700)	4,931,300	3,698,475	249,213	186,910
2110	McCormack-WM. (MBK)	195,000	8.8	(8,800)	186,200	139,650	125,400	94,050
2041	Medford (MBK)	429,000	5.9	(5,900)	423,100	317,325	142,185	106,639
150	Merritt ( MBK )	565,000	18.1	(18,100)	546,900	410,175	257,925	193,444
999	Netherlands (MBK)	339,000	32.4	(32,400)	306,600	229,950	229,950	172,463
348	New Hope (Hanson)	1,084,000	17.4	(17,400)	1,066,600	799,950	266,700	200,025
2024	Orwood/Palm (Rosten)	1,160,000	13.9	(13,900)	1,146,100	859,575	243,075	182,306
551	Pearson District MBK)	591,000	14.1	(14,100)	576,900	432,675	200,925	150,694
2058	Pescadero (G&K)	130,000	2.5	(2,500)	127,500	95,625	48,673	36,505
1007	Pico/Naglee (Rosten)	151,000	8.3	(8,300)	142,700	107,025	107,025	80,269
2090	Quimby (KSN)	1,903,500	7	(7,000)	1,896,500	1,422,375	411,299	308,474
2037	Rindge (MBK)	742,500	15.8	(15,800)	726,700	545,025	422,725	317,044
684	Roberts, Lower (Rosten)	899,000	16	(16,000)	883,000	662,250	378,000	283,500
524	Roberts, Middle (KSN)	314,500	9.7	(9,700)	304,800	228,600	153,222	114,917
544	Roberts, Upper (KSN)	721,000	15	(15,000)	706,000	529,500	217,500	163,125
403	Rough & Ready Is. (KSN)	628,000	6.8	(6,800)	621,200	465,900	126,900	95,175
501	Ryer (KSN)	255,500	20.6	(20,600)	234,900	176,175	176,175	132,131
2074	Sargent-Barnhart (Siegfried)	4,906,255	3.5	(3,500)	4,902,755	3,677,066	49,875	37,406
341	Sherman (Hanson)	506,000	19.5	(19,500)	486,500	364,875	285,375	214,031

2115	Shima (KSN)	15,178,500	6.6	(6,600)	15,171,900	11,378,925	407,288	305,466
1614	Smith (KSN)	909,000	2.8	(2,800)	906,200	679,650	49,275	36,956
RD NO	Name (Engineer)	Application Amount	Levee Length Miles	Deductible	Eligible Costs	Maximum Reimbursement 75 % of (4)	Estimated Available Reimbursement	Advance 75 % of (6)
				\$1,000				
				Per Mile				
				\$				
		\$		\$	\$	\$	\$	\$
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
2089	Stark (KSN)	263,000	3.5	(3,500)	259,500	194,625	51,375	38,531
38	Staten Island (DCC)	3,162,000	24.6	(24,600)	3,137,400	2,353,050	358,050	268,538
548	Terminous (Rosten)	1,035,000	16.1	(16,100)	1,018,900	764,175	240,675	180,506
1601	Twitchell (KSN)	1,150,500	11.9	(11,900)	1,138,600	853,950	236,310	177,233
563	Tyler (KSN)	1,595,000	22.9	(22,900)	1,572,100	1,179,075	484,540	363,405
1	Union, East (KSN)	700,000	14	(14,000)	686,000	514,500	218,250	163,688
2	Union, West (KSN)	820,500	16.2	(16,200)	804,300	603,225	238,350	178,763
1607	Van Sickle (MBK)	120,000	3.7	(3,700)	116,300	87,225	52,725	39,544
2065	Veale Tract (MBK)	556,500	5.1	(5,100)	551,400	413,550	303,736	227,802
2023	Venice (KSN)	4,502,500	12.3	(12,300)	4,490,200	3,367,650	751,358	563,519
2040	Victoria (KSN)	957,500	15.1	(15,100)	942,400	706,800	222,675	167,006
554	Walnut Grove	80,000	4.8	(4,800)	75,200	56,400	56,400	42,300
2026	Webb (MBK)	1,960,000	12.9	(12,900)	1,947,100	1,460,325	183,825	137,869
828	Weber (Rosten)	140,000	1.7	(1,700)	138,300	103,725	46,725	35,044
2122	Winter (MBK)	299,500	4.8	(4,800)	294,700	221,025	161,377	121,033
2072	Woodward (Rosten)	1,149,000	8.8	(8,800)	1,140,200	855,150	207,900	155,925
2119	Wright-Elmwood (KSN)	1,054,500	7.1	(7,100)	1,047,400	785,550	149,925	112,444
2068	Yolano (MBK)	75,000	8.7	(8,700)	66,300	49,725	49,725	37,294
<b>Total</b>		<b>88,213,055</b>	<b>763.1</b>	<b>(763,100)</b>	<b>87,449,955</b>	<b>65,587,466</b>	<b>15,000,000</b>	<b>11,250,000</b>

**Table 3**  
**2008-09 Delta Levee Maintenance Subventions Program**  
**Estimated Reimbursement Summary**

<b>Levee Costs Work Categories</b>	<b>Application Amount</b>	<b>Available Reimbursement Amount</b>	<b>Reimbursement Rate</b>
Maintenance Deductible	763,100		
Net Maintenance Costs	13,452,200	10,089,150	75%
Fish and Wildlife Costs	2,240,500	1,680,375	75%
HMP Costs	6,949,000	3,230,475	46%
Bulletin 192-82	26,767,500	-	0%
Priority 1 Total	35,957,000	-	0%
Priority 2	38,040,755		0%
Priority 3	-		0%
Total	88,213,055	15,000,000	





## CENTRAL DELTA WATER AGENCY

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July 9, 2008

Via email [mikemi@water.ca.gov](mailto:mikemi@water.ca.gov)

Mike Mirmazaheri  
Program Manager  
Delta Levee Program  
Department of Water Resources  
1416 Ninth Street  
Sacramento, CA 94236

Re: Five (5) Year Levee Plan

Dear Mr. Mirmazaheri:

Thank you for the opportunity to provide a suggested five (5) year levee plan. This submittal is intended to provide the overarching plan within which Districts would submit five (5) year plans outlining the intended levee work categories with rough estimates of cost. These work plans will necessarily change with conditions in the field and progress of work. The five (5) years included are 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14. For 2008-09 we suggest the same priorities. For Delta Levees Proposition 84 provided \$275 Million and Proposition 1E \$500 Million for a total of \$775 Million. For the five years it is assumed that at least \$100 Million will be available each year.

Our view of the need to preserve Delta levees extends to all of the present levee systems. The inter-relationship of the various islands and tracts due to seepage, wind wave generation and as habitat for both local and migratory fish and wildlife mandates that the plan should attempt to preserve all levee systems with due consideration of the Legislature's concern that preservation of all may not be economically justifiable. Outlined herein are the priorities and constraints which will provide economic support with appropriate justification.

The Legislature's findings and declarations in Water Code sections 12981 and 12982 provide the guidance in which we concur.

**"§ 12981. Unique resources with statewide significance; preservation**

(a) The Legislature finds and declares that the delta is endowed with many invaluable and unique resources and that these resources are of major statewide significance.

(b) The Legislature further finds and declares that the delta's uniqueness is particularly characterized by its hundreds of miles of meandering waterways and the many islands adjacent thereto; that, in order to preserve the delta's invaluable resources, which include highly productive agriculture, recreational assets, fisheries, and wildlife environment, the physical characteristics of the delta should be preserved essentially in their present form; and that the key to preserving the delta's physical characteristics is the system of levees defining the waterways and producing the adjacent islands. However, the Legislature recognizes that it may not be economically justifiable to maintain all delta islands.

(c) The Legislature further finds and declares that funds necessary to maintain and improve the delta's levees to protect the delta's physical characteristics should be used to fund levee work that would promote agricultural and habitat uses in the delta consistent with the purpose of preserving the delta's invaluable resources."

**"§ 12982. Public benefit from privately maintained levees**

The Legislature further finds and declares that while most of the delta's levees are privately owned and maintained they are being subjected to varied multiple uses and serve to benefit many varied segments and interests of the public at large, and that as a result of the varied multiple uses of such levees, added maintenance costs are being borne by adjacent landowners."

Although the smallest of islands may at first blush appear to be expendable, the habitat value (which in many cases is supported with private funds) would be lost. Such habitat value is extremely difficult to replace especially in terms of supporting habitat for waterfowl in the Pacific Flyway and providing meandering shoreline. With increasing development along the entire west coast of the United States, the opportunity to preserve supporting habitat for the Pacific Flyway is greatly diminishing. It is also extremely difficult to replace the meandering shoreline habitat and meandering waterway recreational opportunity provided by even the smallest levee systems. The impacts of seepage and wind-generated waves on surrounding levees and lands are assumed to be less critical with the flooding of smaller islands however, significant impacts can still result. Scour in adjoining channels resulting from levee breaks or even from the ongoing tidal flow of water in and out of the flooded area, scour from rerouting of channel flow (including the flow of water to the export pumps) and changes to the land surface such as from oxidation of organic soils can result in major long lasting adverse impacts to adjoining areas.

### Limited Ability to Generate Local Revenue for Cost Share and Project Funding

The limited ability to generate revenue from local assessments to meet cost-sharing requirements and to fund the levee work in advance of reimbursement is a primary constraint under the Levee Subvention Program. Local assessments are based on allocations of the benefits derived from the levee-related services provided by the local levee maintaining districts. In most cases these are reclamation districts. Pursuant to California Constitution Article XIII D increases in assessments must be submitted to an assessment ballot proceeding where a majority protest based on the maximum dollar amounts to be assessed will stop the assessment. The benefit allocations are typically based on land use where the ratios for allocation from one use to another are fairly well bracketed and the constraint is the agricultural use ability to pay. Further consideration of ability to pay for districts which have significant agricultural use is unnecessary as the limitations are clearly demonstrated by previous analysis. As to urban levee systems, it is important to continue to recognize that State funding is intended to provide contribution from beneficiaries of the levee system other than the landowners within a particular district and to in part compensate for damages to the levee system caused by users of the Delta other than the landowners. We believe the funding priorities and cost shares set forth herein adequately account for ability to pay for all eligible districts including those with urban levee systems.

As presently structured, the Delta Levee Subvention portion of the Delta Levee Program cannot facilitate timely completion of urgently needed levee work. The substantial under-funding of the Delta Levee Subvention Program in recent years coupled with substantially increased cost of meeting regulatory requirements has left most participating districts with very little capability to fund additional levee work.

### FEMA Eligibility

FEMA is applying a very rigid interpretation of the requirements under the so-called Delta Hazard Mitigation Plan (HMP). Instead of the good faith progress approach applied in previous years, FEMA has denied eligibility if any part of a levee system fails to meet HMP requirements. For the 2005/06 flood event, the one (1) foot above the 100 year flood elevation requirement was the greatest constraint. Portions of the Delta levees are settling and can be expected to continue settling for many years to come. The crowns of levees on which county roads and State highways are located are typically raised less frequently to reduce disturbance of costly road surfacing. Changes in historical benchmark elevations have added to the non-compliance. Although federal funding has not been made available to support the Delta levee programs, federal Disaster Assistance has at times been substantial. Priority funding is needed to re-establish and maintain HMP compliance to help assure future FEMA assistance. HMP compliance with a robust levee program should demonstrate a good faith effort on the part of the State and locals towards reasonably reducing the threat of future flooding. We would expect such effort to be recognized by FEMA.

HMP is not an acceptable levee standard but rather a means of measuring progress to satisfy FEMA. The PL 84-99 agricultural standard is viewed as the minimum acceptable level of protection against failure due to flooding. Any other higher levels of protection should be determined and prioritized by DRMS, Delta Vision, etc. and funding for those more expensive fixes would be expected to come from other sources of state money and other beneficiaries.

#### 5-Year Plan

Definitions - Urban Islands and Tracts are those with levee systems which protect areas with existing and ongoing urban development where the levees have at one time been accredited or are in the process of being accredited as meeting FEMA requirements for urban development.

Non-Urban Islands and Tracts are those other than Urban Island and Tracts.

Project levee and non-project levee shall be as defined in WC 12980.

Special Project Program - The Special Project portion of the Delta Levee Program should incorporate broader funding of needed levee work throughout the Delta. We suggest that the Special Levee Project program be separated into two parts: State Special Projects and Local Special Projects.

The State Special Projects would continue the past practice with emphasis for the eight (8) western Delta islands thought to be most important to restrain salinity intrusions, assistance for levees protecting the towns of Thornton and Walnut Grove and for other levee projects. For the 5 year planning period, the expenditures should be focused on levee improvement. Other expenditures including habitat enhancement should not exceed ten (10) percent of the amount of funding for the State Special Projects.

The Local Special Projects would be applied throughout the Delta to the non-project, non-urban islands and tracts other than the eight (8) western Delta islands. The first priority for the local special projects should be funding of work necessary to achieve and maintain HMP requirements on the non-project, non-urban islands and tracts and achieving and maintaining minimum project levee standards on project levees. This work should be funded 100% by the State. The non-project levee work should be designed to raise crown elevations to one (1) foot above the 100 year flood elevation plus an additional one-half (1/2) foot to account for periodic levee settlement. For areas with public roadways the design should include the one (1) foot above the 100 year flood elevation plus an additional one (1) foot. For non-project levees, the crown width should at a minimum meet the HMP required sixteen (16) feet but should seek to achieve a minimum of twenty-two (22) feet on levees without public roadways and the then current crown width or twenty-eight (28) feet (whichever is greater) for levees with such roadways. The HMP required all weather road on the levee crown must be included. The second

priority should be funding ninety percent (90%) of the cost of habitat mitigation related to non-urban islands and tracts for all priorities of work including PL 84-99 and DWR Bulletin 192-82 agricultural standards. The third priority should be funding ninety percent (90%) of the cost of work on non-project, non-urban islands and tracts to reach the PL- 84-99 or DWR Bul. 192-82 agricultural standard with a height of eighteen (18) inches above the 100 year flood elevation plus one-half (1/2) foot of additional elevation for levees without public roadways and one (1) foot of additional elevation for levees with public roadways. Crown width should be twenty (20) feet on levees without public roadways and the then current crown width or twenty-four (24) feet (whichever is greater) for levees with such public roadways.

#### Levee Subvention Program

\$1,000.00 per mile deductible.

First Priority - 75% reimbursement up to \$20,000.00 per mile for annual levee maintenance.

Second Priority - 75% reimbursement for habitat mitigation.

Third Priority - 75% reimbursement for all levee work in excess of First Priority work up to an additional \$20,000.00 per mile including HMP work and work to meet the PL 84-99 or DWR Bul. 192-82 agricultural standards with an additional one-half (1/2) foot of crown elevation to account for periodic settlement on levees without public roadways and an additional one (1) foot on levees with public roadways. Crown width should be twenty-two (22) feet on levees without public roadways and the then current width or twenty-eight (28) feet (whichever is greater) for levees with such public roadways.

Fourth Priority - Third priority work in excess of \$20,000.00 per mile.

#### District Five Year Plans

Each participating district should provide a five year plan setting forth the general description and estimated dollar amount of work proposed for each of the categories set forth above assuming advances for the Subvention Program as currently applicable and payments by the State for Special Projects as invoices are received. Special State Projects and Special Local Projects will require specific plans and project review consistent with current practice. Local district development of plans, conduct of soil investigations and preparation of project documents will be funded through the Local Special Projects at a cost share of 90% State, 10% Local.

Mike Mirmazaheri  
Program Manager

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July 9, 2008

Additional Priorities Established Through the Annual Allocation of Funding to the Following Categories: (assumes One Hundred Million Dollars per year)

Delta Levee Subventions	12 million
State Special Projects	44 million
Local Special Projects	44 million

If funding is insufficient to fund all acceptable projects in the Delta Levee Subvention and/or the Local Special Projects Categories for the particular fiscal year, the funding will be allocated within each category first, based on the specific priorities and second, prorated within the underfunded priority to fully fund a segment of qualifying work in each applying District. The proration will be based on the total lineal feet of acceptable levee work within the underfunded priority which is included in the application of a particular district as compared to the total lineal feet of acceptable levee work included in all applications for the particular fiscal year in the specific priority. The District may elect to receive the funding available to provide maximum State cost share for a segment of the work and defer the remainder of the work in the priority to a subsequent year. Any excess of funds within the Delta Levee Subventions or Special Local Projects Categories shall be applied first to fund any shortfall in the other category within the particular fiscal year and second to supplement funding in the particular category in the subsequent fiscal year.



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Locals

# DELTA LEVEE SUBVENTIONS PROGRAM PROCEDURES AND CRITERIA

October 17, 2008

The following administrative provisions set forth the requirements for State financial assistance to local agencies for nonproject and eligible project levee maintenance and rehabilitation activities and guide the State administration of the program.

## PART I

### ADMINISTRATIVE PROVISIONS

#### Article 1 DEFINITIONS

1.1 "Board" means The Central Valley Flood Protection Board.

1.2 "Corps" means the U.S. Army Corps of Engineers.

1.3 "Delta" means the Sacramento-San Joaquin Delta as described in Section 12220 of the Water Code.

1.4 "DFG" means the Department of Fish and Game.

1.5 "Department" means the Department of Water Resources.

1.6 "District" means a Reclamation District or other local agency which has jurisdiction over the maintenance and rehabilitation of nonproject levees in the Delta.

1.7 "District Operations" means work that is done by District Owned Equipment and work forces on the payroll of the Reclamation District. For Districts made up of ten owners or less, District Operations may also include levee work accomplished by farmer-owned equipment and farm work forces. For these Districts, the identity of the landowners and the District are substantially the same.

1.8 "FEMA" means the Federal Emergency Management Agency.

1.9 "Force Account Work" means work arrangements defined in terms of engaging labor, services, or equipment on a per time unit basis.

1.10 "Levee system" means all the levees (both project and non-project) which protect an area of benefit.

1.11 "Local agency" means any city, county, district or other political subdivision of the State which is authorized to maintain levees.

1.12 "Nonproject levee" means a local flood control levee in the Delta that is not a project facility under the State Water Resources Law of 1945, as shown on page 38 of the Department of Water Resources Sacramento-San Joaquin Delta Atlas, dated 1993.

1.13 "Project levee" means a federal flood control levee that is a project facility under the State Water Resources Law of 1945 Chapter 1 (commencing with section 12570) and Chapter 2 (commencing with Section 12639) of Part 6, if not less than the majority of acreage within the jurisdiction of the local agency that maintains the levee is within the primary zone of the Delta, as defined in Section 29728 of the Public Resources Code.

1.14 "Reasonable Competition": This concept is generally applicable in cases where only one bid or no bids are received for a particular levee project, as it applies to Section 20925 that was added to the Public Contract Code by SB 1893. Reasonable Competition involves the expectation that through bidding or negotiation the lowest reasonable price for a certain unit of work or work improvement will be realized.

1.15 " Work subject to SB 1893": As defined by SB 1893, this work includes "any improvement or unit of work". In the context of the Subventions Program, this work includes all levee rehabilitation and maintenance activities, except where such work is done as part of District Operations.

## Article 2 PLANS

### 2.1 Long-Range Plans

Long-range plans shall consist of:

- a. A map showing the levee system on which project levees, non-project levees under jurisdiction of the local agency, and the ownership of non-project levees which are not under jurisdiction of the local agency, if any, are clearly identified.
- b. An inventory of the non-project and eligible project levees.
- c. Either engineering plans or a statement setting forth the local agency's long-range plans and methods for maintenance and rehabilitation of the non-project and eligible project levees in the system, including plan for preservation and planting of levee vegetation where vegetation on the levee section is acceptable. The plans should describe the local agency's existing maintenance schedule for the entire non-project and eligible project levee system, and the schedule for post-rehabilitation maintenance, if such maintenance is expected to occur on a different schedule. The plans should also describe the local agency's long-range goal for flood protection (i.e., Short-Term Hazard Mitigation Plan Standards, PL 84-99 Standards, Bulletin 192-82 criteria, or other applicable standard).



- d. The local agency's method of ensuring the maintenance and rehabilitation of the portions of the system's non-project and eligible project levees, if any, which are not under its jurisdiction.
- e. The target date for completion of levee rehabilitation.
- f. An estimate of the cost of annual routine maintenance and the total cost of rehabilitation. Also, an estimate of the cost of any mitigation measures, required by DFG to ensure that no net long-term loss and net long-term improvement of habitat, if available.
- g. All plans and schedules for levee improvement submitted to FEMA pursuant to the State Flood Hazard Mitigation Plan, Disaster Declaration FEMA-758-DR-CA (1986).
- h. An inventory of non-project and eligible project levees, consisting of:
  - (1) A map of the levees at a scale of 1"= 2,000' or larger;
  - (2) The establishment of a levee mile or station designation and marking on the ground such mile or station designations at one-half mile or 2,500-foot intervals;
  - (3) A profile of the centerline of the levees;
  - (4) Typical cross-sections of the existing levee and cross-sections at problem areas from the landside levee toe to under water levee toe or its adjacent berm. Sections should be taken at the beginning and end of transitions between materially different levee cross sections;
  - (5) The location, plan, and description (elevations where pertinent) of all encroachments on, over or through the levee section.
  - (6) Such other material or information pertinent to the inventory that the local agency may have submitted to FEMA, under the 1986 State Plan as referred to in subsection (g).
  - (7) Drawings showing the dimensions (length, width, and depth, in feet) of the proposed worksites, including all borrow areas or dredge areas.
- i. Provisions for the acquisition of any easements on and adjacent to the levee where the Department has made the determination required by Water Code Section 12987 that an easement for open space and minimum tillage of the soil is desirable to maintain the structural stability of the levee.
- j. Plans indicating proposed land use changes, if any.

k. A plan to compensate for any impacts to fish, wildlife or riparian habitat caused by levee rehabilitation or maintenance. The plan shall meet the goal of no net long-term loss and net long-term improvement for these habitats.

## 2.2 Annual Routine Maintenance Plans

Maintenance plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. They shall be in the form of a statement setting forth the local agency's planned maintenance within the scope of Section 5.I of Part II (Criteria). An estimate shall be prepared showing the cost of each major activity and the year's total maintenance cost. When a statement will not adequately describe the work, it shall be shown on engineering plans or sketches. In addition the following information shall be included:

- a. A map, aerial photo, or engineering drawing showing the actual (or anticipated) locations and dimensions of the areas where maintenance will occur for the appropriate fiscal year, including, but not limited to, borrow areas, dredge areas, areas to be sprayed, disked, burned, or mechanically cleared, and areas where revetment must be replaced.
- b. A description of the maintenance schedule and how it applies to the areas under consideration for reimbursement (i.e. length of time between maintenance treatments).

## 2.3 Rehabilitation Plans

Rehabilitation plans shall cover work to be performed on a fiscal year (July 1 to June 30) basis. The plan shall be shown on an engineering drawing. The plan must show details of riparian vegetation or wildlife or fisheries habitat within the work area that will be disturbed and any proposed revegetation or mitigation measures the agency will take.

An estimate shall be prepared showing the cost of each major activity and the total cost of the planned rehabilitation. Rehabilitation plans will conform to Section 6.1 of Part II-Criteria of this document.

## 2.4 Plan Revisions

To the extent that there is a significant change in the Maintenance or Rehabilitation Plan(s), the local agency shall inform the Department in writing. Depending on the type of plan revision, approval may be required from one or more of the following agencies: Department, DFG, and/or Board.

## 2.5 Disaster Assistance

For applications made pursuant to Water Code Section 12993, the following conditions apply: This work, which was denied for reimbursement by both FEMA and OES, under Public Law 93-288, must have been denied for reasons of levee improvement or normal levee maintenance work. Work items under this category

must be clearly and separately indicated on the agency's work plan. Damage Survey Reports (DSR's) and/or other pertinent documentation must be included with the agency's application as well as evidence of all costs incurred for the work performed. The fiscal year limitation for work performed under the Rehabilitation or Maintenance Plans does not apply here.

### Article 3 ADMINISTRATION

#### 3.1 Application Requirements

A local agency must make application to the Board in order to participate in the program for each fiscal year. The application shall be submitted in triplicate and should consist of:

- a. A letter expressing the agency's desire to participate.
- b. A statement of the agency's long-range plans (Section 2.1).
- c. A summary of the agency's annual routine maintenance work plan (Section 2.2).
- d. A summary of the agency's rehabilitation work plan (Section 2.3) for the fiscal year in which the work will be accomplished.
- e. A statement defining the land use of the area protected by the levee as well as any planned land use changes.
- f. Acreage of the protected area and approximate number of permanent inhabitants.
- g. Method of assessment, assessed value, local agency tax rate for flood control, bonded indebtedness for flood control, and a summary of unpaid warrants for flood control work.
- h. Proof of application for federal disaster assistance, whenever eligible, under Public Law 93-288.
- i. If application is for reimbursement of work deemed ineligible for federal disaster assistance, Damage Survey Report and/or other pertinent documentation (Section 2.5) plus proof of costs incurred.
- j. A signed hold-harmless agreement, as described in Water Code Section 12992, for execution by the Board. The form for this agreement shall be obtained from the Board.
- k. Evidence that the agency's maintenance and improvement plans are in compliance or consistent with the California Environmental Quality Act. This requirement may be satisfied by a statement that the local agency has approved

1) Categorical Exemption, 2) Negative Declaration, or 3) Environmental Impact Report.

l. Evidence that the agency's maintenance and improvement plans comply or are consistent with the California Endangered Species Act and the Federal Endangered Species Act.

m. Evidence that the agency's maintenance and improvement plans comply or are consistent with the Clean Water Act and the Rivers and Harbors Act, as administered by the U.S. Army Corps of Engineers.

A local agency must also notify responsible and trustee agencies of any actions that fall within these agencies' jurisdiction. As required by law.

Fish and Game will prepare a detailed outline of documentation requirements to assist local agencies' compliance with the intent of this section and Section 2.3 of Part I. Article 2.

### 3.2 Application Deadline

With the exception of applications submitted pursuant to Water Code Section 12993, the application shall be submitted to the Department by ~~May 4~~ July 1 for levee maintenance and rehabilitation work for the following fiscal year. Applications for Section 12993 work, i.e. work previously believed but determined not to be eligible for assistance under Public Law 93-288, may be submitted any time prior to June 30 of the fiscal year in which reimbursement is requested.

### 3.30 Approval of Application

The Department shall review the application and make recommendations to the Board. The Board will approve the application in whole or in part or disapprove the application. The applicant will be informed of the disapproval of any application or any part of an application.

Following are among the conditions that need to be satisfied for approval of the application:

### 3.31 Engineering

All plans shall be prepared and signed by a registered civil engineer and approved by the local agency. The plans shall indicate which field activities will be performed under the supervision of an engineer.

### 3.32 Department of Fish and Game Review

DFG shall review all local agency plans. Plans shall not call for the use of channel islands or berms with significant riparian communities as borrow sites for levee repair material, unless fully mitigated. Plans shall not result in a net long-term loss of riparian, fisheries, or wildlife habitat.

Costs required to meet DFG approval are eligible for reimbursement under the Subventions Program. DFG reserves the right to request additional information, pursuant to Section 3.1, it deems necessary to make a recommendation for approval of the application. DFG also reserves the right to disapprove applications that fail to meet the conditions set forth in these procedures, consistent with their role under SB 34 of ensuring no net long-term loss of habitat.

### 3.33 CEQA/NEPA Compliance

The local agency shall be the lead agency for purposes of CEQA.

### 3.4 Agreements

After the plans are approved, the Board and the agency shall enter into an agreement for the reimbursement of the costs of the work to be performed, in accordance with the approved application, with the provisions and policies of Water Code Sections 12980 et seq, with these Provisions and Criteria, and with the recommendations of the Department. The agreement will be submitted to the local agency for signature. Upon return of the signed agreement by the local agency, the Board will execute the agreement.

### 3.5 Inspection of Work

Upon completion of the agreed work, the local agency shall notify the Department, and the Department will inspect the work. If the work is in conformance with the approved plans and agreement, the Department will so notify both the local agency and the Board. If the work is not in conformance, the Department will point out the deficiencies, and upon satisfactory completion of any necessary remedial work, the Department will notify the local agency and the Board.

The local agency shall cooperate in the conduct of all inspections, including inspections by the Department, pursuant to Water Code Section 12989, to monitor and ascertain compliance with and progress toward meeting the standards in the State's Flood Hazard Mitigation Plan, as updated or amended.

### 3.6 Bookkeeping and Records

The local agency shall maintain records and books relating to the costs and quantities of labor and materials used, purchased, or contracted for in the performance of its levee maintenance and rehabilitation work.

The Board and Department shall have full and free access at all reasonable times to these books and records with the right at any time during office hours to make copies thereof.

The Department, the Board, or the State Controller shall have the right to conduct audits, on a periodic basis, of the local agency's expenditures for levee maintenance and rehabilitation. The purpose of such audits is to assure that subvention moneys are being properly used, that payments are not being made under different assistance programs for the same work, and that local agencies are seeking the best terms reasonable in its use of State funds.

The local agency shall cooperate fully in any such audits and shall maintain all receipts, accountings, books, invoices, and records pertaining to its levee work for a period of ten years after the work has been performed or the expenses therefore incurred.

#### Article 4 REIMBURSEMENTS

##### 4.1 Eligibility

A local agency shall be eligible for reimbursement for work completed under the agreement with the Board in accordance with the following:

- a. No costs shall be reimbursed until the local agency has spent an average of \$1,000 per mile for all of its nonproject and eligible project levees.
- b. The local agency shall be reimbursed up to seventy-five percent of the costs incurred in excess of \$1,000 per mile for all of its nonproject and eligible project of levees.
- c. Nonproject levees which are not under the jurisdiction of an applicant agency but are in its system may be maintained under a formal agreement which results in costs to the local agency. Such levees will be considered the same as the local agency's other nonproject levees in computing State reimbursement.

##### 4.2 Eligible and Ineligible Costs

Local agency costs incurred in the preparation and execution of the work plans, which meet the criteria and are a part of the Board approved plans, will be used to compute the amount of reimbursement. These costs must be associated with the fiscal year for which the application was made.

Reasonable costs for engineering, labor, materials, equipment rental, capital costs of rehabilitation and maintenance of non-project and eligible project levees (including appurtenances), and pro rata rental charges of agency-owned equipment are eligible for reimbursement. A survey of local rates will be used to ensure that rates charged to local agencies are justifiable.

The salaries, expenses, and fringe benefits of the executive board, executive officer in charge of the agency, their immediate stenographic support and the pro rata rent charge for their office and equipment are not eligible for reimbursement.

New construction or maintenance of drainage pumps and drainage ditches, with the exception of toe drains, are not eligible items for reimbursement. They are considered to be items which are incidental to flood control activities.

#### 4.3 Agency Claims

The local agency shall submit a claim for reimbursement to the Board upon completion of the maintenance and rehabilitation work associated with the fiscal year (July 1 through June 30) for which application is made to the Subventions Program. This claim must be filed by ~~August 30~~ November 1 of the following fiscal year. The Department will compute the amount of reimbursement to the local agency based on the claim submitted and the field investigation. The Department will then recommend to the Board certification for payment.

#### 4.4 Certification for Payment

Upon receipt of the Department's findings that the work has been satisfactorily completed, the Board may certify payment and reimbursement of all or a portion of the estimated State share for immediate reimbursement.

#### 4.5 Prioritization of Funds

If, in any year, the total eligible costs incurred exceed the State funds available, the Board will apportion the funds among those levees, or levee segments identified by the Department as being most critical and beneficial for flood control, water quality, recreation, or wildlife, in accordance with the following funding prioritization scheme:

- a. The first priority for funding is for levee maintenance, Fish and Wildlife, and rehabilitation up to the Bulletin 192-82 standards (for geometry) associated with the existing land use at the time SB 34 was signed into law.
- b. If available funds are sufficient to fully fund work described in 4.5a. (above), full reimbursement of claims will be made. When claims exceed available funds, full reimbursement of each claim will be made according to the categories listed below (in the order listed) until insufficient funds are available to fund a category. The claims in this latter category will be paid on a pro rata basis. Claims in lower categories will not be paid.

Category 1: ~~The Reclamation Board~~ Central Valley Flood Control Board mandated top priority funding items.

Category 2: Plans that make special provisions for protection or enhancement of fish and wildlife habitat, recreation opportunities or land use changes to reduce land subsidence or erosion. These provisions must be coordinated with the Department and/or DFG.

Category 3: Plans based on meeting the Short-Term Hazard Mitigation Standards (see Appendix).

Category 4: Plans based on meeting Bulletin 192-82 standards or PL 84-99 standards (see Appendix).

The second priority for funding is for portions of an individual district's fiscal year work in excess of an average of \$100,000 per mile of all non-project and eligible project levees.

The third priority for funding is for reimbursement of work in excess of bulletin 192-82 standards.

#### 4.6 Advances

Upon submission of plans for maintenance and improvement of non-project and eligible project levees and approval by the Board, the local agency shall be eligible for advances in the following manner:

- a. The Department may provide, at its discretion, an advance to the applicant in an amount not to exceed seventy-five percent of the estimated State's share. No advance shall be made until the applicant has incurred costs averaging one thousand dollars (\$1000) per mile of non-project and eligible project levee.
- b. The amount advanced shall be subtracted from the final amount due to be reimbursed after the work has been completed and inspected. If after the work has been inspected and the Department finds the work unsatisfactory, or the advances made exceed the amount reimbursable, the local agency shall promptly remit to the State all amounts in excess of reimbursable costs. (The Board may require a bond to be posted to ensure faithful performance of the work set forth.)

#### 4.7 Work Rejected by FEMA

If after the applicant has applied for federal disaster assistance under PL 93-288, it is determined that the work performed does not qualify for such assistance, the applicant may apply for reimbursement to the Subventions Program. The associated costs shall be deemed incurred by the applicant in the year in which the latter application is filed. Such work must be compatible with Articles 5 and 6 of Part II-Criteria of this document, and must have been denied reimbursement under Public Law 93-288, or the California Disaster Assistance Act.

Work items under this category must be clearly and separately indicated on the agency's application and all costs for work performed must be substantiated. The Department will review the agency's application and will determine the eligibility as if the costs were incurred in the fiscal year of application. The review of costs will be conducted as regular subventions work and is still subject to audit by the State Controllers Office.

If, due to a shortfall of funds, an applicant is not fully reimbursed for work rejected by FEMA in one fiscal year, the applicant may apply for the remaining reimbursement in the following fiscal year(s).



#### 4.8 Documentation

The local agency may be required to provide proof of payment for work done under the Subventions Program associated with the fiscal year for which application is made, subsequent to the final disbursement of funds associated with that fiscal year.

#### 4.9 Competitive Bidding

Neither the Department nor the Board is charged with the administration of SB 1893 (Ch. 1042, stats of 1988), which took effect on January 1, 1989. However, many of the provisions are pertinent to the Subventions Program. The administration of the Subventions Program in conjunction with SB 1893 requires clarification of some of the provisions of SB 1893, from the perspective of the Subventions Program.

##### *Administration*

The provisions of SB 1893 speak largely for themselves. All Subventions Work Subject to SB 1893 "in excess of \$25,000 shall be let to the lowest responsive, responsible bidder". If the District determines that no bids are in the best interests of the District, any or all bids may be rejected. The District may re-advertise, negotiate, or proceed to complete the project by Force Account. In any case, pertinent documentation indicating the reasons for the particular course of action should be retained. This documentation should clearly demonstrate that the concept of Reasonable Competition was adhered to, and consequently the price for the project met the lowest reasonable cost expectation.

As stated earlier, the District's contracting procedures should be in conformance with State law. Following are specific points that are important to the efficient administration of the Subventions Program. The responsibility for contract administration by the District should be clearly defined. A statement providing the name of the responsible individual should be included in the application to the Subventions Program. It should be noted that either unit price or lump sum type of contracts are acceptable; however, cost plus contracts should be avoided.

##### *Audits*

To ensure that the Districts are in compliance with the provisions of the Delta Levee Subventions Program as well as any other applicable provisions of law, periodic audits will be conducted. One of the primary goals of these audits is to ensure that the Districts are pursuing the lowest reasonable cost for levee projects. The retention of source documentation is important for these audits. Source documentation involves the concept of calibration when dealing with quantities. For example, barge tags by themselves do not represent adequate documentation. Some type of backup calibration is necessary to substantiate the unit quantity per barge. This calibration can consist of certification by a weigh master, or a test by the project engineer. In general, one of the responsibilities of

the contract administrator is the provision of quantities calibration, where applicable. Work performed by labor forces is best documented through original timesheets.

Audits may require access to contractor's books. Therefore, all contracts should include a standard clause providing for access to the contractor's books.

In general, when dealing with the District's records, especially for Districts that make use of more than one financial assistance program, the establishment of a separate account for Subventions activities is a great help in separating out costs for Subventions and other District activities. It is therefore encouraged that a special county account be set up for Subventions warrants.

### *Equipment Rates & Prevailing Wages*

Eligible costs for equipment used in District Operations are limited to 90 percent of CALTRANS equipment rates published in the current CALTRANS publication entitled "Labor surcharge and Equipment Rental rates". These rates defined the maximum rate for which reimbursement under the Subventions Program is available.

The decision to base reimbursement on 90 percent of CALTRANS equipment rates was made for the following reasons:

This percentage limits the fixed component of these rates to include only depreciation with no provision for overhead or profit.

The variable component incorporates all maintenance and operating expenses including fuel.

If a District can demonstrate that these rates are too low for their particular situation, these rates can be adjusted upward on a case by case basis, at the Department's discretion.

Labor costs for District Operations and/or Force Account Work, eligible for reimbursement, are limited to the Prevailing Wage, or the actual hourly salary, whichever is lower.

#### 4.10 On-Island borrow material

##### *Definition and Limitations*

The use of on-island borrow material, although not encouraged by the Department, is a reimbursable item under the Delta Levee Subventions Program. On-island borrow material is defined as material originating from within the Reclamation District. Following are limitations that apply when reimbursement is requested for use of on-island borrow material as fill for Delta levees:

- a. The material must be certified by a registered engineer as suitable for levee construction.
- b. The excavation of such material shall be limited to sites at least 400 feet from the crown of the levee. An exception to this limitation will be made in cases where material has been stockpiled immediately adjacent to the levee.
- c. Compliance with any and all applicable provisions of State law is required. Particular attention is directed to Section 1090 of the California Government Code and the provisions of Senate Bill 1893, which took effect on January 1, 1989.

#### *Reimbursement Formula*

Following are the reimbursable components associated with the use of on-island borrow material in levee rehabilitation:

- i.) Associated engineering costs
- ii.) Transportation and placement expenses
- iii.) Royalty of \$1.00 per cubic yard of material.

#### 4.11 Claim Processing and Reimbursement

Eligible costs for reimbursement are limited to: (1) construction costs incurred in the fiscal year for which application is made, and (2) associated administrative and engineering costs incurred either during this fiscal year or within a six-month period preceding or following this fiscal year. Following is the procedure used to determine eligible costs under the Subventions Program for maintenance and rehabilitation activities:

#### *Annual Routine Maintenance*

The maximum allowable expenditures for annual routine maintenance are limited to \$20,000/mile of nonproject and eligible project levees. The \$20,000 cap includes the \$1,000/mile of local contribution toward levee maintenance required by SB 34 and AB 360. Any maintenance expenditures in excess of the \$20,000 cap will be given a priority equal to work under Bulletin 192-82 criteria.

In case of emergency, this maintenance cap can be exceeded. Emergency means imminent danger of levee conditions developing that could result in high repair costs or possible levee failure, as defined by DWR levee inspectors. Costs incurred under such an emergency are only reimbursable to the extent they are not covered by other agencies, such as the Corps of Engineers and/or FEMA.

Annual routine maintenance items include:

- a. Inspection of levees.
- b. Extermination of rodents and filling burrows to minimize seepage through the levee section.
- c. Shaping the levee crown.
- d. Repair and shaping patrol and access roads.
- e. Repair of minor slipouts, erosion, repair or subsidence of levee section.
- f. Removal of drift deposits and debris from levee and waterside berm.
- g. Control of seepage and boils, including installation of impervious cores in the levee section.
- h. Cleaning drains and toe ditches adjacent to the landside levee toe.
- i. Vegetation control including cutting, removing or trimming vegetative growth such as weeds, brush and trees to the extent necessary to inspect and maintain the levee and a five foot strip adjoining the landside toe.
- j. Repair or restoration of waterside slope protection.
- k. Planning for flood emergencies.
- l. The costs associated with removal of encroachments and restoration of the levee section are eligible. The costs incurred by the local agency to compensate for the loss of encroachments are not reimbursable under this program. In the case where pipes through the levee are raised above the floodplain, 50 percent of the cost of the pipe through the levee design section is eligible. Fifty percent of the costs to replace or repair reclamation encroachments, such as cutoff walls, may be considered eligible on a case-by-case basis when a shared benefit with flood control can be shown.
- m. Levee profiles and cross sections.
- n. Underwater surveys.
- o. All engineering services and associated administrative work in connection with the Levee Subventions Program, except specialized engineering work done in connection with rehabilitating levees to standards associated with proposed or ongoing change in land use.
- p. Other maintenance. This item would include miscellaneous items such as gates to control traffic on the levee, guard rails, etc.

## *Levee Rehabilitation*

Improvements to levees, eligible for first priority funding, are separated into two categories: (1) levee rehabilitation to achieve the minimum levee dimensions to comply with Short-Term Hazard Mitigation Plan Standards, and (2) levee rehabilitation to Bulletin 192-82 criteria (possibly a Long-Term Hazard Mitigation Plan). First priority rehabilitation work is limited to \$100,000 per mile of non-project and eligible project levees. Work in excess of \$100,000 is included under second priority for funding, as explained on the funding prioritization scheme in the Article 4.

Levee standards are discussed in the appendix to the Procedures. For brevity, the Short-Term Standards are referred to as HMP standards and the Long-Term Hazard Mitigation Plan is referred to as Bulletin 192-82 criteria.

The following items are considered HMP work:

- a. Raising the levee to an elevation one foot above the 100-year flood frequency level. A tolerance of 0.5 foot (up to 1.5 feet above 100-year flood level) will be considered HMP work to make allowance for subsidence.
- b. Flattening waterside slopes to 1-1/2 horizontal to 1 vertical and/or landside slopes to 2 horizontal to 1 vertical.
- c. Widening the levee crown to 16-foot width at an elevation one foot above the 100-year flood frequency level.

Work that is considered eligible as part of the Bulletin 192-82 criteria includes:

- a. Raising levees to provide 1.5 feet freeboard for protecting agricultural land and 3.0 feet freeboard for levees protecting urban areas. Again, a tolerance of 0.5 foot to make allowance for subsidence is acceptable.
- b. Flattening waterside levee slopes to 2 horizontal to 1 Vertical, and landside slopes to 3 horizontal to 1 vertical or flatter. Constructing landside berms to increase levee structural stability.
- c. Widening levee crown to 16 feet after the desired levee crown elevation as specified in a. has been achieved.
- d. Replacing existing or constructing new patrol roads and/or upgrading patrol and access roads to provide greater width or structural section for levee inspection, patrol and flood fighting purposes. If an asphalt surface is desired, reimbursement will be only the cost of an equivalent stretch of gravel surface road. If an existing asphalt road is upgraded, reimbursement is eligible to the extent that no other agency is responsible for maintenance of that road.
- e. Providing turnouts, access roads and ramps as necessary.

f. Relocation of toe ditches, if required, as a result of levee rehabilitation to Bulletin 192-82 criteria.

g. Placing rock protection, or equivalent, on the waterside levee slope except where such rock protection is the responsibility of a federal agency.

In summary, the priority of funding for work under SB 34 when claims exceed the available funds is as follows:

There are two general limitations: (1) the maximum reimbursement for annual routine maintenance is limited to \$20,000 per mile of nonproject and eligible project levee, and (2) the combined total expenditures for first priority levee rehabilitation, which most often is the sum of Fish and Wildlife, HMP and Bulletin 192-82 work, is limited to \$100,000 per mile of non-project and eligible project levees.

A summary of the priorities is as follows:

a. Annual routine maintenance.

b. First Priority Rehabilitation:

(1) ~~Reclamation Board~~ Central Valley Flood Control Board mandated top priority funding items.

(2) Plans that make special provisions for protection or enhancement of fish and wildlife habitat, recreation opportunities, or land use changes to reduce land subsidence or erosion.

(3) Work to meet HMP standards, described above.

(4) Work to meet Bulletin 192-82 standards and annual routine maintenance in excess of an average of \$20,000 per mile for all nonproject and eligible project levees.

c. Second Priority Rehabilitation:

The second priority for funding is for portions of an individual district's fiscal year levee rehabilitation work in excess of an average of \$100,000 per mile for all non-project and eligible project levees.

d. Third Priority Rehabilitation:

The third priority for funding is for reimbursement for work in excess of Bulletin 192-82 standards.

## PART II

### Article 5 LEVEE MAINTENANCE

Maintenance Definitions and Criteria: "Maintenance" means annual or routine activities to preserve all of the local agency's non-project and eligible project levee systems in its current condition. The following are examples of "maintenance":

- a. Inspection by the local agency to ensure that adequate maintenance is being carried out and that dangerous or unusual conditions are discovered early - as a minimum, levees shall be inspected by September 15 to allow time to correct dangerous conditions, in April to provide information to plan annual maintenance and repair, during and after periods of high water, and during and after periods of high winds which can accelerate wave erosion;
- b. Extermination of burrowing rodents and filling their burrows with compacted material;
- c. Shaping the levee crown to drain freely;
- d. Repairing and shaping patrol or access roads and controlling the weight and speed of all vehicles using patrol roads on the levee crown;
- e. Repairing any minor slipouts, erosion, or subsidence of the levee section;
- f. Removing drift deposits, debris, and litter from the levee and berm;
- g. Cleaning drains and toe ditches which are adjacent to the landside levee toe and which intercept seepage;
- h. Cutting, removing or trimming vegetative growth such as weeds, brush, and trees to the extent necessary to inspect and maintain the levee and a 5-foot strip adjoining the landside toe and retaining or planting vegetation in accordance with the current edition of "Levee Encroachment Guide for Vegetation on Project Levees" adopted by The Reclamation Board Central Valley Flood Control Board;
- i. Repairing or restoring rock protection except where such repairs are the responsibility of a federal agency - minor repairs can be made in cases of federal responsibility, if the appropriate federal agency does not perform these repairs expeditiously;
- j. Planning for flood emergencies to ensure the availability of adequate repair materials and equipment so that immediate action can be taken in the event of a flood fight;
- k. Removing or modifying encroachments which endanger the levee or interfere with maintenance;

I. Determining the profile and conducting a cross section survey of levees often enough to detect subsidence (normally at least every fifth year).

## Article 6 LEVEE REHABILITATION

6.1 Rehabilitation Definitions "Rehabilitation" means improvements to levees which increase their physical integrity or degree of flood protection. The following are examples of "rehabilitation":

- a. Raising portions of a levee system to increase minimum freeboard or rectify effects of subsidence and/or erosion;
- b. Flattening slopes or constructing landslide berms to increase structural stability;
- c. Widening the levee crown and shaping to drain;
- d. Constructing or reconstructing a patrol road to provide greater width or a structural section adequate for all-weather traffic for inspection, patrol, and flood fighting purposes (all-weather is interpreted to be a gravel surface). If an asphalt surface is desired, reimbursement will be only for the cost of an equivalent stretch of gravel surface road;
- e. Providing turnouts, access roads and ramps as necessary;
- f. Placing rock protection, or equivalent, on the waterside berm and/or on the waterside levee slope when erosion may potentially endanger the stability of the foundation or the integrity of the levee, except where such rock protection is the responsibility of a federal agency;



## PART III

### Article 7 CARRYOVER

In some years, it may not be possible for the State to reimburse all districts up to the 75 percent level of eligible work. This is especially true when the amount of work actually performed by the local districts greatly exceeds the amount of direct pay available for disbursement.

Districts will be allowed to carry forward un-reimbursed eligible expenditures. Following is the procedure to accomplish full reimbursement of the State share in year(s) subsequent to one in which insufficient funds are available for reimbursement of the full 75 percent State share.

In the year of the shortfall, the amount available will be distributed among all districts according to the funding prioritization scheme specified in Article 4.5. The State's share of eligible expenditures in excess of the amount disbursed in that year will be carried over into the following fiscal year. If, at the end of this fiscal year, there are funds available after the State has reimbursed the districts to the full 75 percent level for priority one and priority two work, that excess will be applied to the amounts that have been carried over from previous year(s). The excess State funds will be used to fully reimburse carryover amounts according to the procedure described in the next paragraph. Any amounts remaining will be carried over again to the next year and so forth until all carryover amounts have been reimbursed, or the Delta Flood Protection Act terminates.

The earliest fiscal year, for which these Carryover Provisions apply, is the first fiscal year in which a shortfall of funds occurred after the enactment of the Delta Flood Protection Act of 1988. Supplemental payments to provide for full reimbursement to the State's 75 percent share for this earliest fiscal year and subsequent fiscal years of funding shortfalls will be made, using the funding prioritization scheme set forth in Section 4.5, as follows:

First Priority work, separated into subcategories, will be reimbursed first, in order of subcategory priority, for the earliest year of funding shortfall.

If there are still excess funds available, First Priority work for subsequent years of funding shortfalls will be fully reimbursed next, up to the current fiscal year.

In the event that First Priority work has been reimbursed to the 75 percent level for all districts in all years, Second priority work will be considered when excess funds are available. Starting with the earliest year of funding shortfall for Second Priority work, reimbursement up to the full 75 percent will take place.

If there are still excess funds available, Second Priority work for subsequent years of funding shortfalls will be fully reimbursed next, up to the current fiscal year.

Reimbursement-of Third Priority work will be considered only after all First and Second Priority work in all years has been reimbursed to the 75 percent level. As for cases of First and Second Priority work, reimbursement for Third priority work will start with the earliest year of funding shortfall and continue in subsequent years, if excess funds are available.

The above priority of payment scheme is not applicable to carryover expenditures from fiscal year 1987-88. All carryover work for that year will be accorded equal priority, since the funding prioritization scheme set forth in the Preliminary Procedures adopted in December 1988 was not applicable in that fiscal year.

The calculation of carryover amounts for any given year will be made by the Department. Each district will be notified in writing by the Department if any reimbursement claimed is to be carried over. Districts do not need to reapply in subsequent years for eligible costs carried over by the Department.

#### Article 8 LEVEE EASEMENT ACQUISITION

The Delta Flood Protection Act of 1988 (SB 34), which was signed into law in March 1988, included provisions for State reimbursement for the costs of easement acquisition by a local agency under the Delta Levee Subventions Program and the Special Flood Control Projects Program. SB 34 stated:

"The local agency cost of acquisition of the easements shall be reimbursable by the Department (of Water Resources) from moneys appropriated pursuant to paragraph (1) of subdivision (b) of Section 12300."

Levee easements are defined by SB 34 as:

"...up to 400 feet in width from the crown along levees in areas where the Department (of Water Resources) determines that such an easement is desirable to maintain structural stability of the levee."

This Article sets forth the requirements for State financial assistance to local agencies for levee easement acquisition.

#### *Purpose of Easement acquisition*

The purpose of easement acquisition is to assist in achieving or maintaining structural stability of Delta non-project and eligible project levees, in areas where the Department determines such easements would be beneficial to levee stability. Secondary benefits, such as the protection, or creation of wildlife habitat areas and the prevention of such future levee problems as encroachments, may also be a consequence of easement acquisitions.

To further the goal of levee stability, while assuring the island landowners reasonable rights, SB 34 requires levee easements to:

" (1) restrict the use of the land to open-space uses with minimum tillage of the soil, including, without limitation, non-tillable crops such as pasture, the propagation of wildlife habitat, and other compatible uses"

"(2) provide full access to the local agency for levee maintenance and improvement purposes, and"

(3) allow the owner to retain reasonable rights of ingress and egress as well as reasonable rights of access to the waterways for water supply and drainage. "

### *Funding*

#### 1. Funding Percentage

The acquisition of levee easements is not part of the regular Delta Levee Subventions Program. However, funding for these acquisitions parallels the funding of Subventions Program activities in a number of ways. State reimbursement for easement acquisitions is 75 percent of the total cost of easement acquisition including any associated engineering and administrative costs. A deductible amount of \$1000 per mile of non-project and eligible project levees is not applicable for easement acquisition reimbursement.

#### 2. Funding Prioritization & Cap on Reimbursement of Easements

As mentioned above, the easement acquisition and Subventions programs are two separate, but related programs. The interconnection between these two programs is mainly due to the funding source, which is the same for both programs, i.e. the Local Assistance portion of the Delta Flood Protection Fund. Since funds are limited, a shortfall of funding may occur occasionally. Therefore, to the extent that applications for reimbursement of Subventions work and easement acquisitions may exceed State funds available, an interrelated funding prioritization scheme is necessary.

The funding prioritization scheme, described in Article 4.5, will be used in setting funding priorities for Subventions Program activities as well as easement acquisitions in cases of funding shortfalls. In order to limit curtailment of regular Subventions work, total funds available for all easement acquisitions in any given fiscal year are limited to 10 percent of the total Delta Levee Subventions Program direct pay funds allocated for that year. Insufficient applications for-easement acquisitions, or the designation of easement acquisition(s) as lower in priority compared to other Subventions activities can result in the expenditure of less than 10 percent of the direct pay funds for easement acquisition activities.

When a shortfall of funds occurs, the priority for reimbursement of easement acquisitions will be determined on a case-by-case basis. Prioritization of funds for levee acquisitions will generally depend on two factors.

- Potential flood control benefits achievable through levee acquisition.

- Other public benefits achievable through these acquisitions.

The higher the potential flood control benefits associated with the acquisition of a particular easement are, the higher the priority assigned to that acquisition will be. For borderline decisions between priorities, the second factor--degree of other public benefits--will be the deciding factor.

Following are the possible equivalent priorities for reimbursement of levee easement acquisitions that are defined by Article 4.5:

First Priority (Category 3): Plans based on meeting the Short-Term Hazard Mitigation Standards (see Appendix).

First Priority (Category 4): Plans based on meeting Bulletin 192-82 standards or PL-84-99 standards (see Appendix).

Second Priority: Portions of an individual district's fiscal year work in excess of an average of \$100,000 per mile of all non-project and eligible project levees.

### 3. Levee Acquisition as Contribution to Local Share for Subventions Program.

In certain cases, levee easements can be used as a contribution toward-the 25 percent (or more) local cost share percentage required for participation in the regular Subventions Program. Following are the conditions under which a local agency's acquisition of a levee easement could serve as all, or a portion of their local share cost:

- a. The Department confirms that the dedication of an easement is desirable in the maintenance of levee stability.
- b. The local agency acquires this easement through means of an in-lieu dedication, or some other means whereby no claim for any costs associated with the acquisition of this levee easement is filed.
- c. The resulting contribution toward the local cost share would equal 75 percent of the total value of the easement and any pertinent engineering and administrative costs.

### *Administration*

1. A separate application in addition to the Subventions Program application will have to be submitted by the first of May preceding the beginning of the fiscal year for which reimbursement is sought. This application should be consistent with the long-range plans in the Subventions Program application, as set forth in Article 2.1 i.
2. The application should include the following:

- a. Map showing the location of the proposed easement.
  - b. Detailed estimate of all easement acquisition related costs.
  - c. Statement regarding the purpose and benefits of the easement acquisition. If easements are proposed because of levees in poor condition, an analysis of the structural stability of the levees in question will be required. This analysis should be done by qualified engineering firm.
  - d. Proposed schedule for the acquisition process. If the acquisition process is expected to run over into the following fiscal year(s), it should be noted. An updated application must be submitted for each fiscal year in which the acquisition process will run over.
3. A final claim for reimbursement of easement acquisition costs must be filed by the same deadline as final claims under the regular Subventions Program. This deadline is ~~normally the last day in August~~ November 1 following the end of the fiscal year for which application is made.

Again, this final claim must be separate from those filed under the regular Subventions Program. As with the itemized costs in any claim, full documentation such as invoices for services and copies of warrants must be included.

## **APPENDIX**

### **Levee Standards**

Following are synopses of the different stages of levee construction standards. Each of the standards is important for different reasons, which are also briefly summarized.

#### **1. Short-Term Hazard Mitigation Plan Standards**

As part of the requirements to qualify for future federal disaster assistance, local districts should adopt the following minimum standards:

- a. Levees shall have 1-foot of freeboard above the 100-year flood frequency elevations, as provided by the Corps of Engineers.
- b. The minimum crown width shall be at least 16 feet.
- c. Waterside slopes shall be at least 1.5 horizontal to 1 vertical, with revetment in areas where erosion has been a problem. The size of the revetment material shall be appropriate for the slope.
- d. Landside slopes shall be at least 2 horizontal to 1 vertical, with flatter slopes in the lower portion of the levee in areas where soil stability and seepage have been problems.
- e. The levees shall have all-weather access roads.

#### **2. PL 84-99 Standards**

The Corps has developed guidelines for the rehabilitation of Delta nonproject levees to allow for implementation of Public Law 84-99 in the event of a flood in the Delta. If non-project levees are rehabilitated to these standards and certified to that effect before a flood, federal disaster assistance may be available from the Corps. The Delta-specific standards which must be met to be certified a "flood control levee" include (but are not limited to) the following features:

- a. 1.5 feet of freeboard above the 100-year flood stage for all islands and tracts.
- b. The levee will have a 16-foot crown width with an all-weather patrol road.
- c. The minimum waterside slope of the levee will be 2 horizontal to 1 vertical.
- d. The minimum landside slope of the levee shall vary with the levee height and depth of peat.
- e. A levee toe drain will be located 30 feet landward from the landside levee toe.

### 3. Bulletin 192-82 Criteria.

The Department, as part of planning for the Delta Levees Study in Bulletin 192-82, called for the following criteria. SB 34 references these criteria:

- a. Minimum freeboard for levees protecting agricultural and urban land consists of 1.5 ft and 3.0 ft, respectively, above the one in 300-year flood elevations, as determined by the Corps.
- b. A typical improved levee section has a 16-foot crown width with a waterside slope of 2 horizontal to 1 vertical, and a landside slope of, at least, 3 horizontal to 1 vertical.
- c. Landside berms should be constructed where necessary to help provide stability for the weak, highly compressible, peat foundations. Slopes on the landside berms may have to be as flat as 15 horizontal to 1 vertical.
- d. In deep peat areas, staged construction, consisting of periodic raising of the levee crown, back slope, and the landside berm may be required to compensate for continuing subsidence.
- e. Construction of levees on a new alignment (levee setback) are to have a 12 foot crown width and slopes of 2 horizontal to 1 vertical on both the land and watersides.